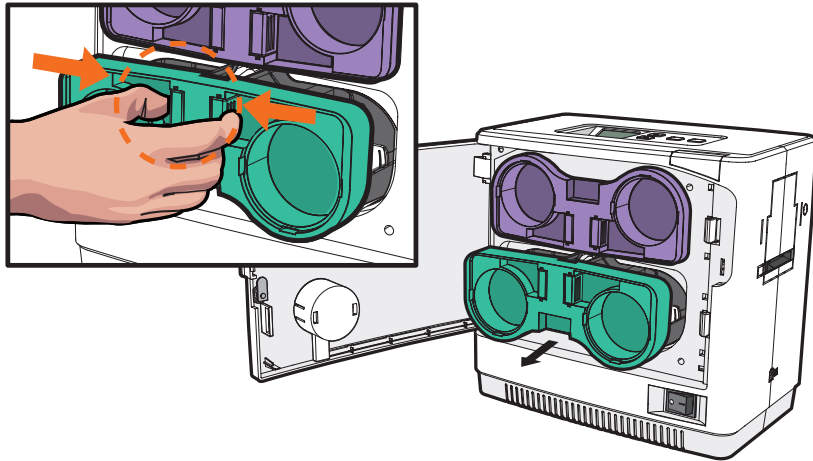


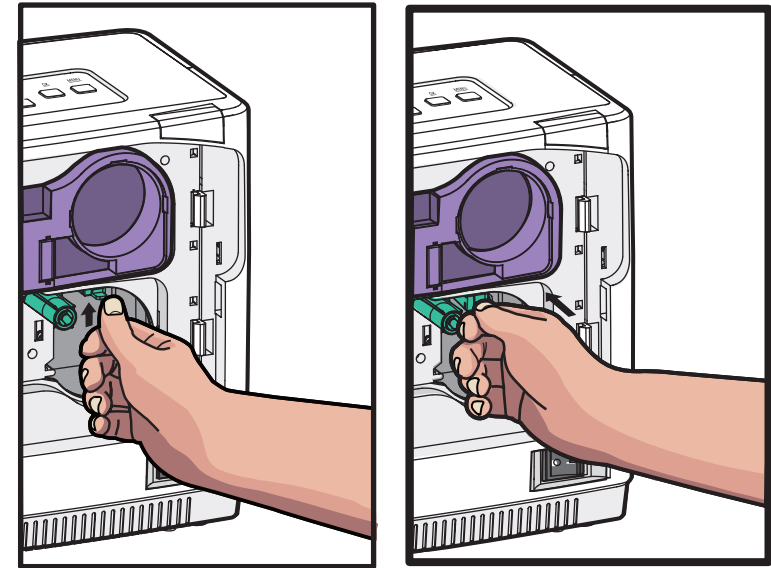
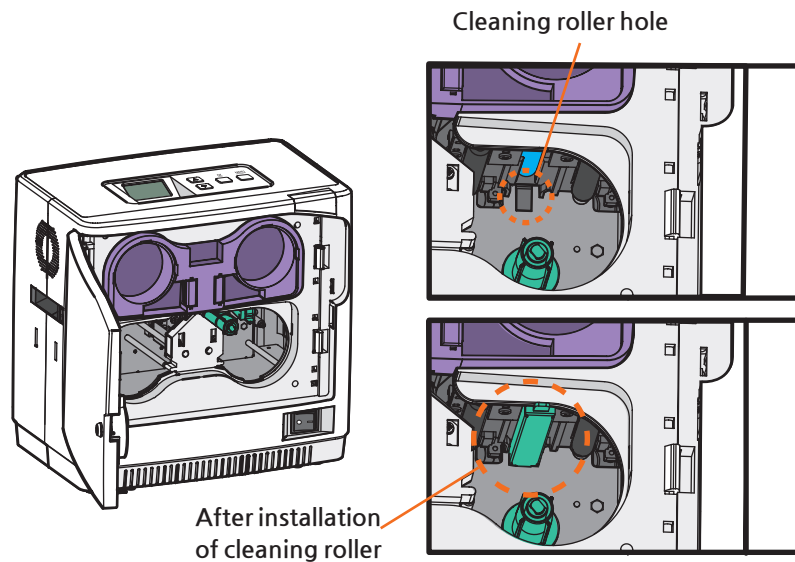
# Load Lower Cleaning Roller & Films

## - Load Lower Cleaning Roller

1. Pull the cartridge out while pressing the Cartridge Load/Eject Button to remove it from the laminator as shown in the image below.

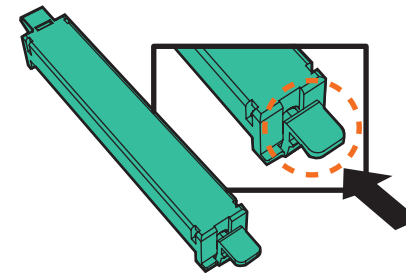


2. Align the Cleaning Roller with its hole and push it up until it clicks.



 Important

- Make sure that it is fully inserted into the Cleaning Roller Hole before pushing the indicated area.

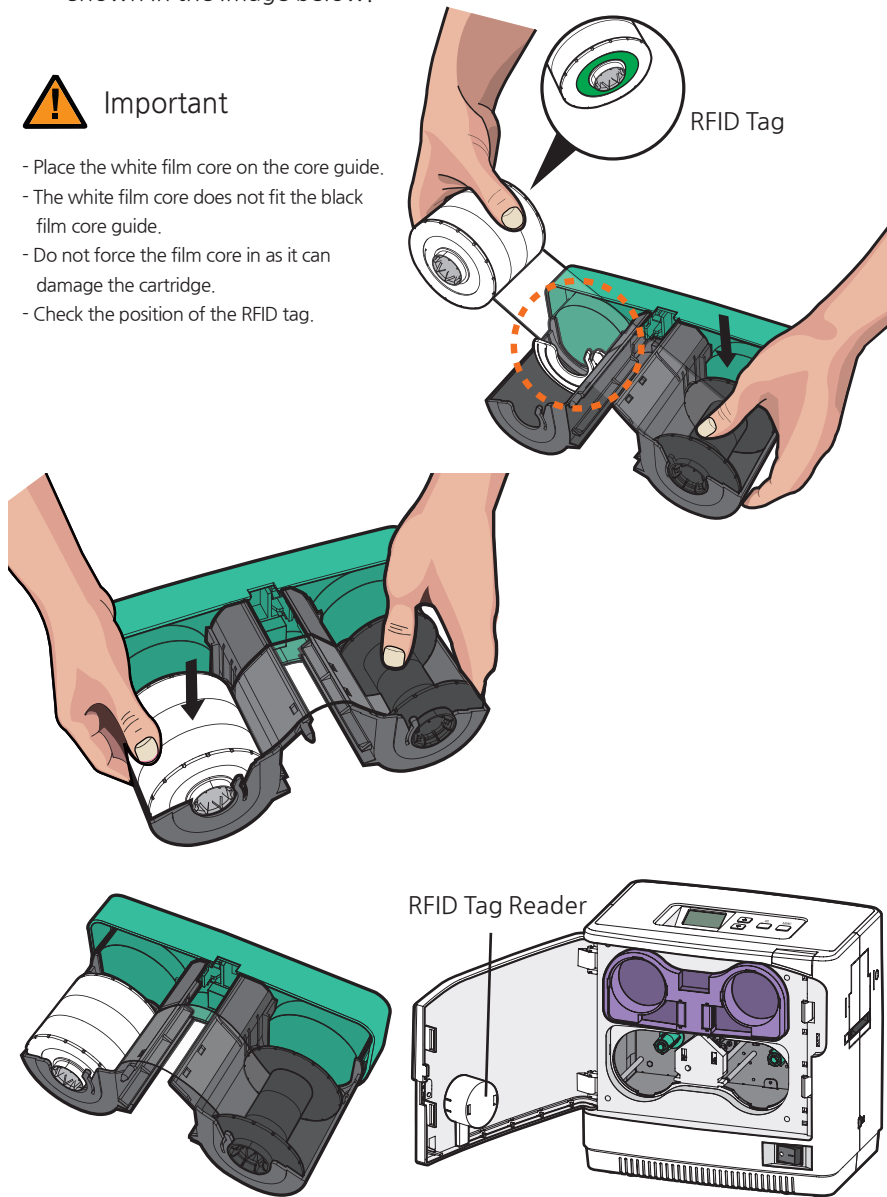


## - Load Films to Lower Cartridge

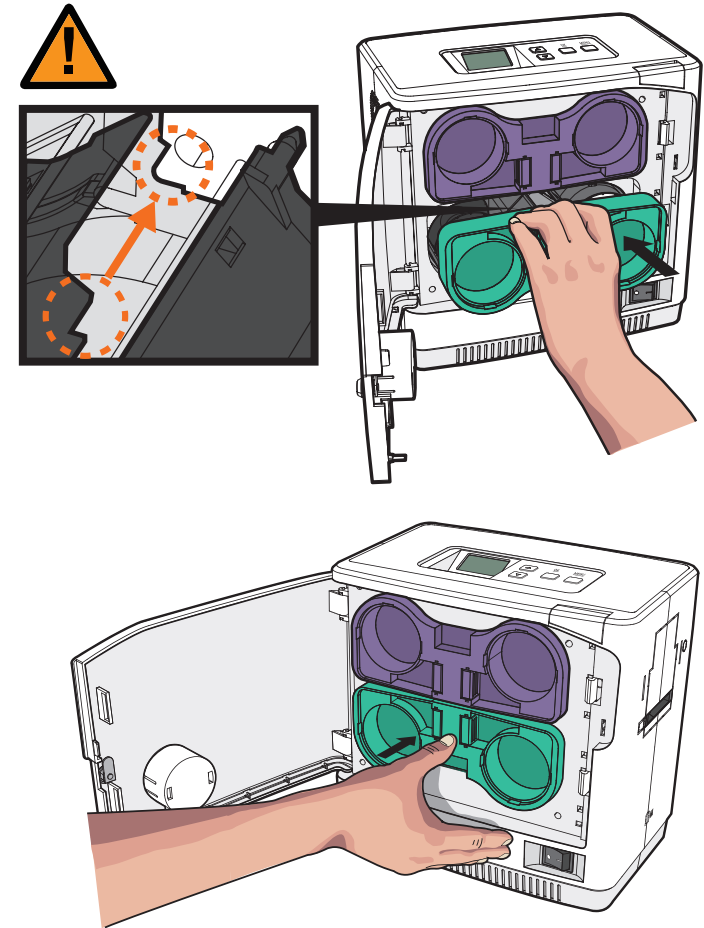
1. Load the films for lamination and rewinding in the correct position as shown in the image below.

### ! Important

- Place the white film core on the core guide.
- The white film core does not fit the black film core guide.
- Do not force the film core in as it can damage the cartridge.
- Check the position of the RFID tag.



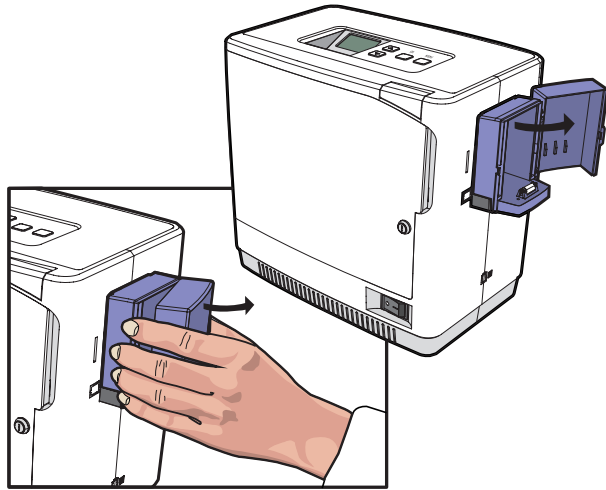
2. Check the position of the Lower Film Cartridge and films for rewinding and push the cartridge in until it clicks.



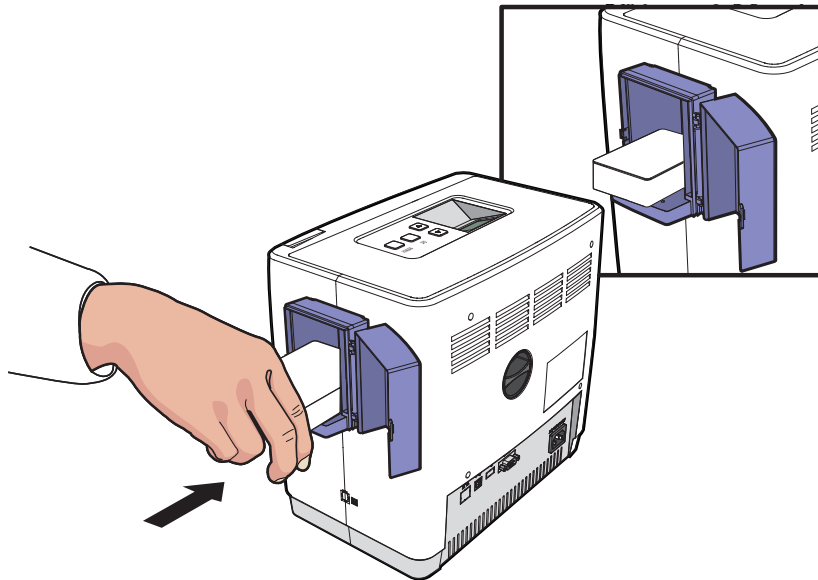
# Load Cards

## - Place cards in the Input Hopper

1. Open the Card input hopper by pulling it sideways.

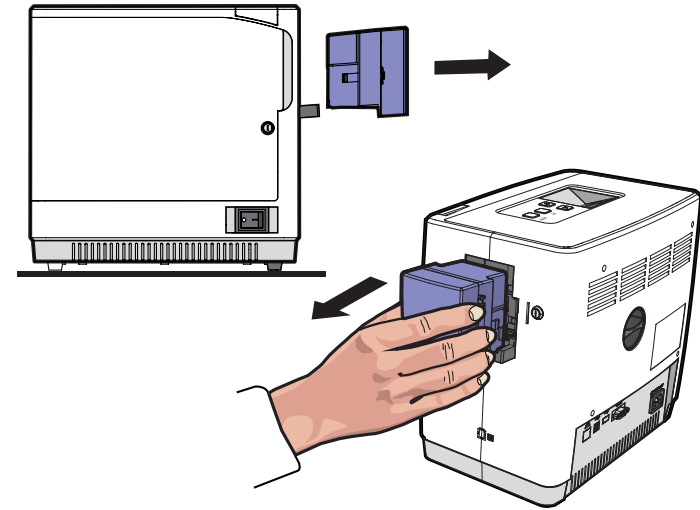


2. Place the cards inside the card input hopper as shown in the picture.

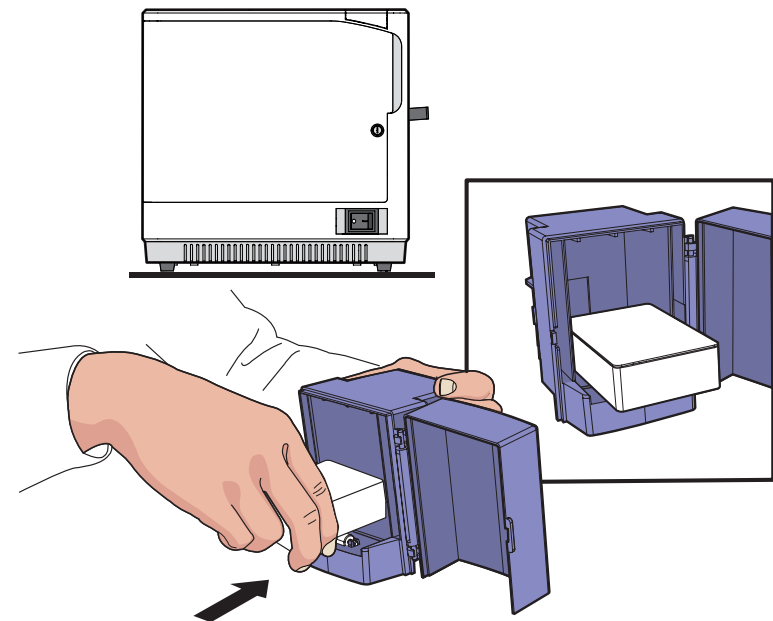


## - Load Cards after taking out the Card Input Hopper

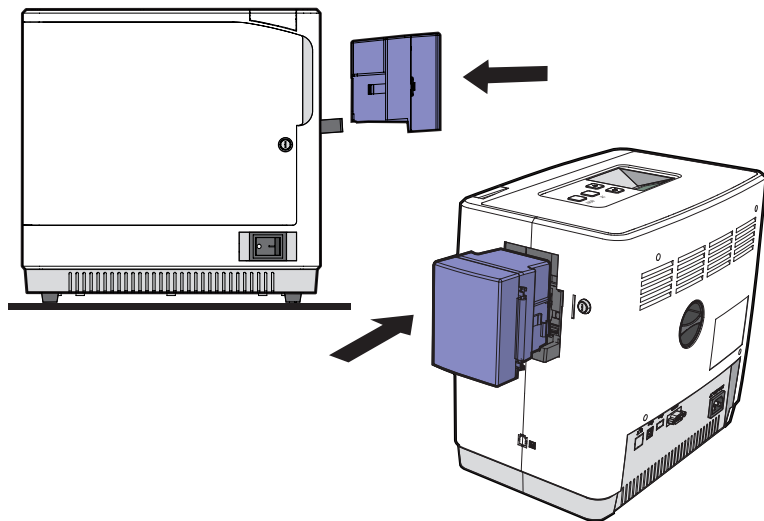
1. Hold the side of the card input hopper and pull it backward to remove it.



2. Hold the backside of the card input hopper with one hand and open the cover with the other. Then, place the cards inside as shown in the picture.

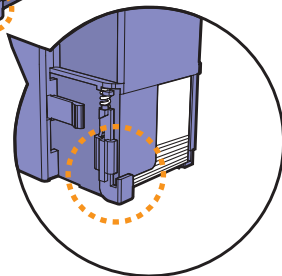
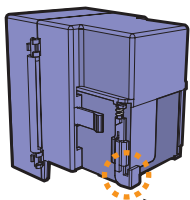


3. Close the cover and place the card input hopper in the tray.

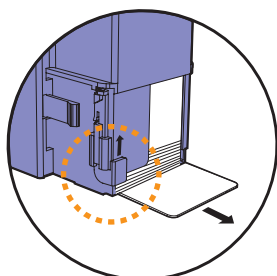


 Note

- The hinge is located where the card is loaded into the path to prevent displacement.
- The hinge is lifted when the card is loaded into the laminator.



Before the card is loaded

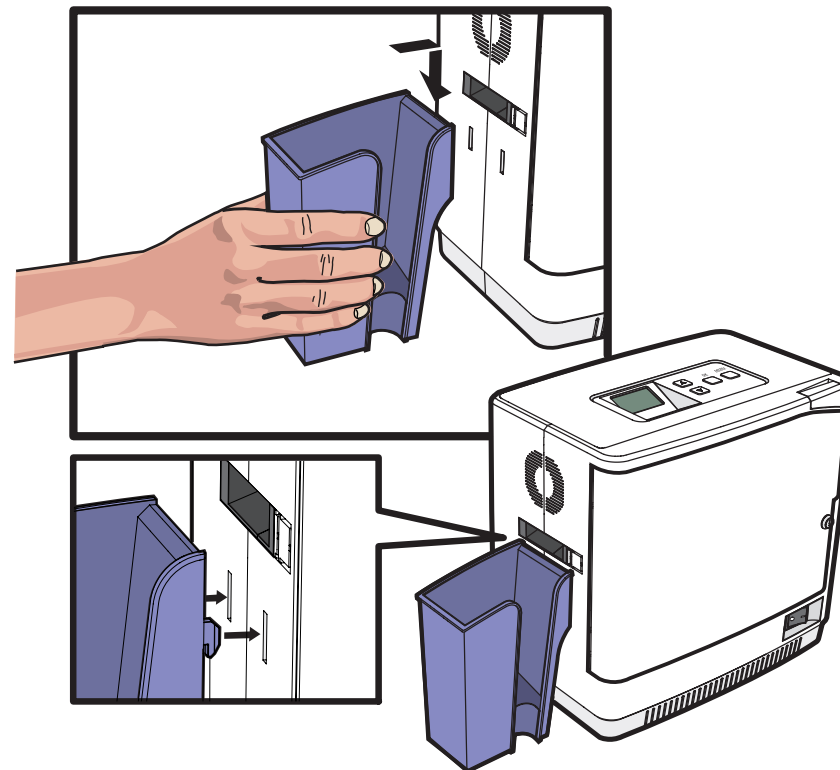


When the card is loading

## Load/Unload Card Stacker to Laminator

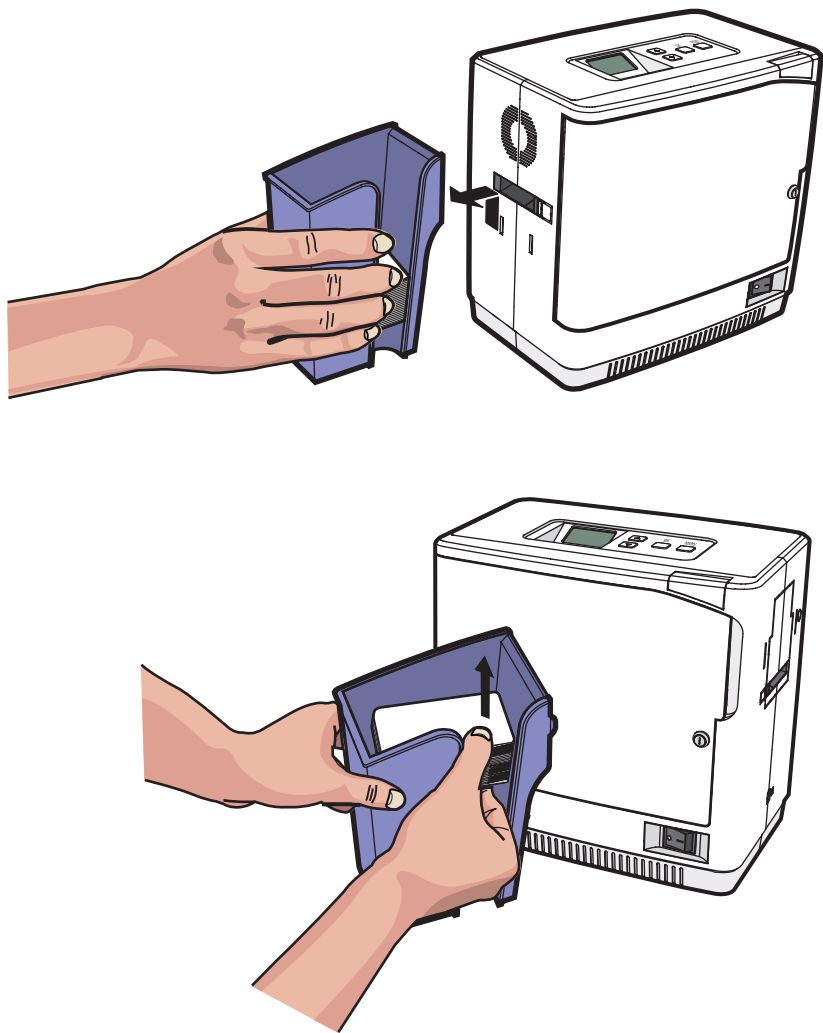
### - Load Card Stacker to Laminator

Insert the hook on the Card Stacker and push it down in the side of the laminator. (Max. 150 cards can be loaded at once.)



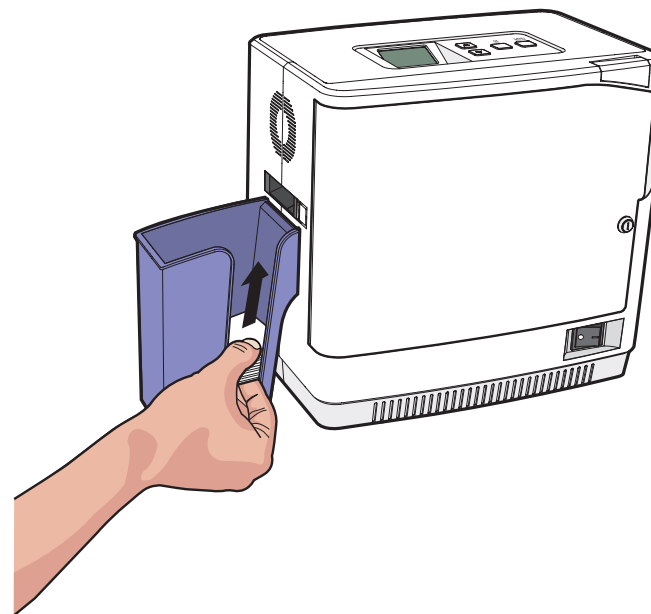
## - Remove Cards after Taking Out Card Stacker

Hold the side of Card Stacker and pull it up to remove as shown in the image.



## - Remove Cards without Taking Out Card Stacker

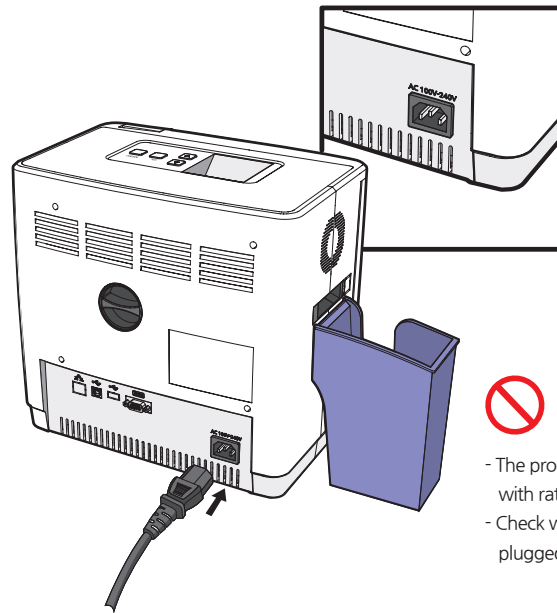
Use your thumb and index finger to take out 60 or fewer cards from the Card Stacker without removing it from the laminator.



# Connect Power & Communication Cables

## - Connect Power Cable

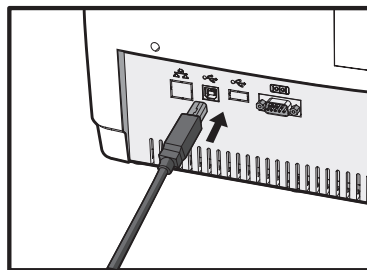
Make sure that the Power Switch is off and connect the AC Power Cable to the Power Port on the back of the laminator.



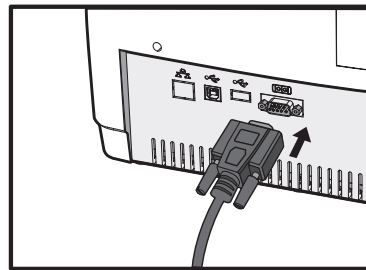
- The product must be used with AC power with rated label.
- Check whether the Power Cable is plugged in before use.

## - Connect Communication Cable

To download the firmware, connect the laminator to a PC using either RS232C or USB Port.



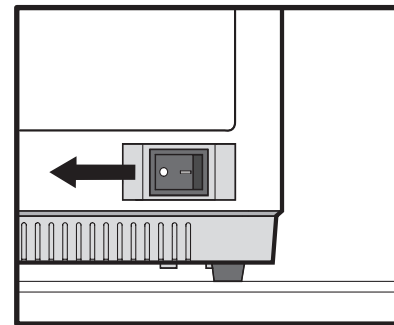
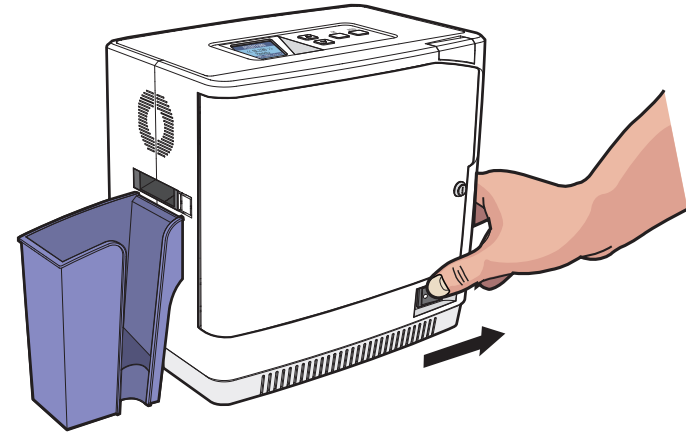
USB Port



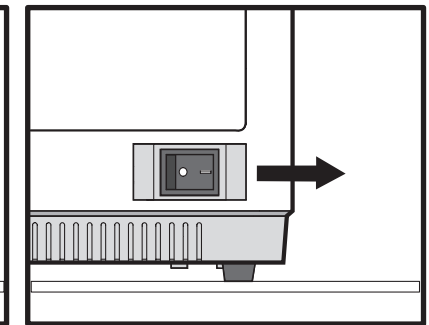
RS232C Port

# Power On

Press the Power Switch (‘—’) to turn the laminator on.



Power ON -> OFF



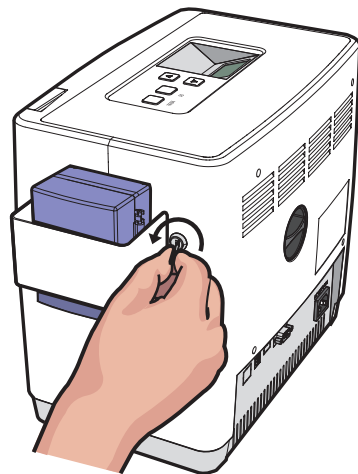
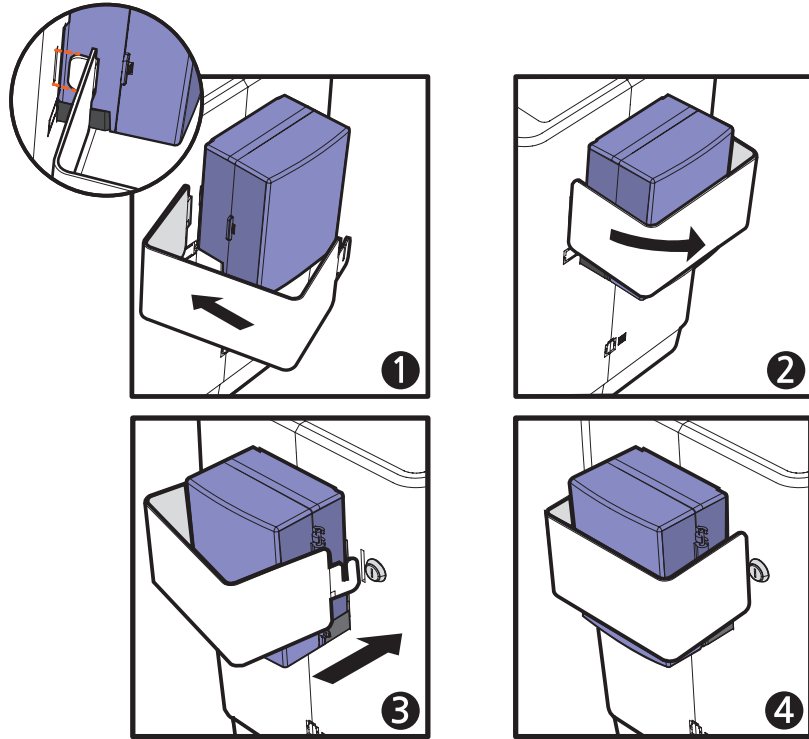
Power OFF -> ON



Electrical Hazard / Fire Hazard

If the product is exposed to rain or liquid, please turn off and unplug the cable, and contact an authorized service representative.

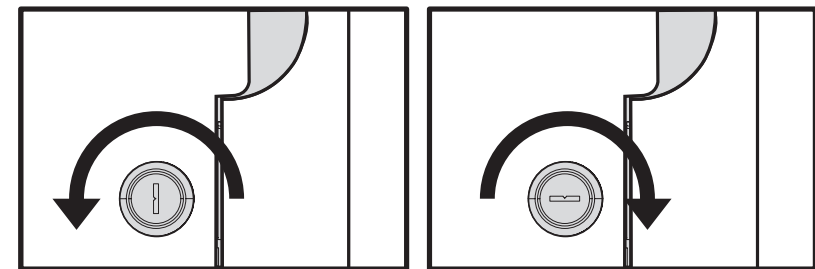
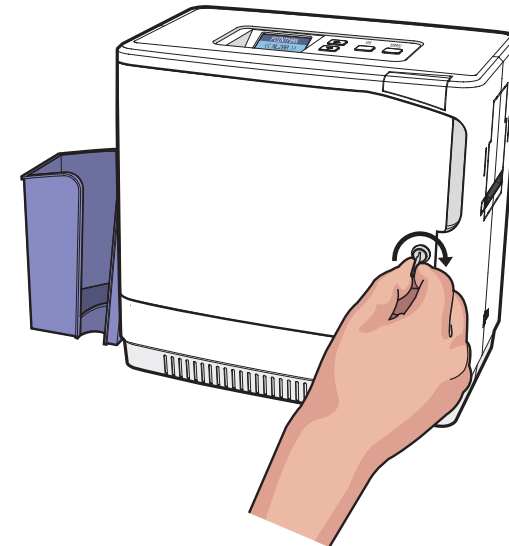
# Card Input Hopper Lock OPTION



Insert the left side of card input hopper lock and mount the other side pulling to the sidaway. Then, use the Lock Key to lock it .

# Front Cover Lock OPTION

Turn the key clockwise to lock the Front Cover.  
The key cannot be pulled out if the Front Cover is not closed. Do not force it out as it can damage the Front Cover.

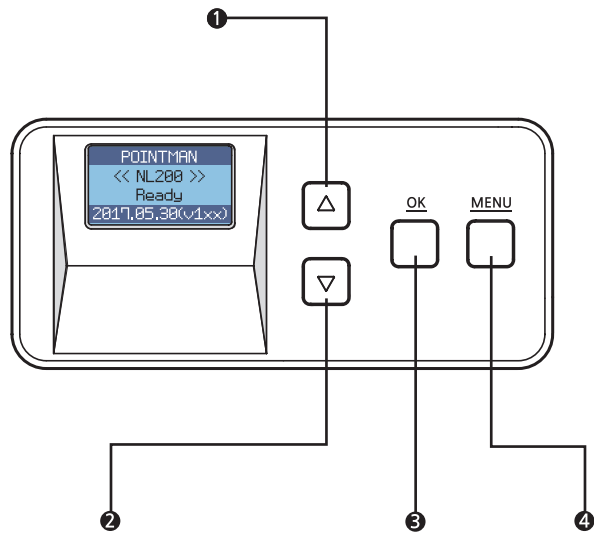


Locked -> Unlocked

Unlocked -> Locked

# Button Control & Menu

## - Buttons

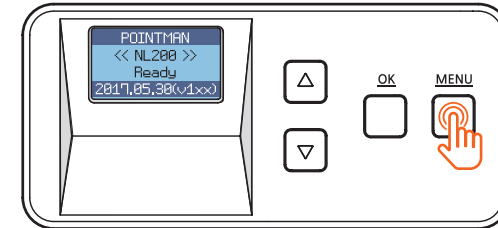


Name	Description
① Menu Navigation (Up)	Increase the value or navigate the menu.
② Menu Navigation (Down)	Decrease the value or navigate the menu.
③ OK	Set the value.
④ Menu	Enter or exit the menu.

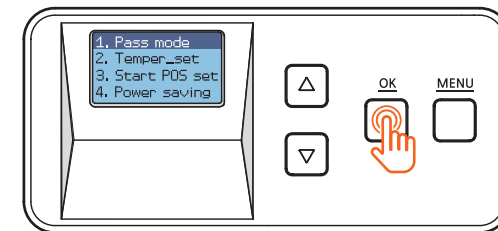
## - Pass Mode

Function : Set pass mode

1. Press 'MENU' to enter the menu mode.



2. Press 'OK' when '1. Pass mode' appears on the LCD display.

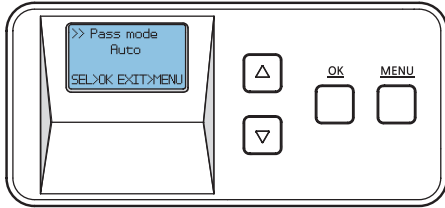






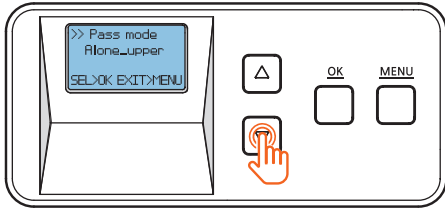
- In the Pass mode, you can choose 'Auto', 'Alone\_upper', 'Alone\_lower', 'Both' or 'Bypass'.  
Use the menu navigation buttons to navigate the menu.

#### Auto mode



Select this option to start laminating automatically when the card is inserted.

#### Alone\_upper



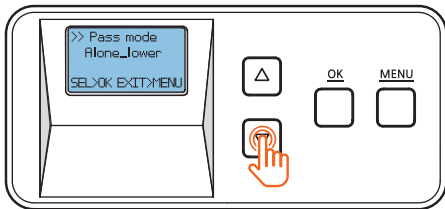
Select this option to laminate only the upper side.



#### Caution

- In the Alone Upper Mode, an error occurs if any film is loaded at the lower cartridge

#### Alone\_lower



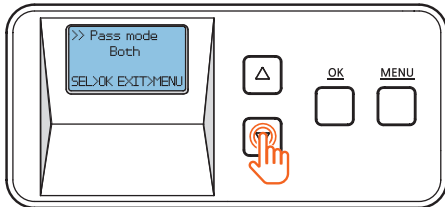
Select this option to laminate only the lower side.



#### Caution

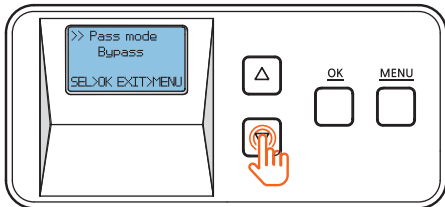
- In the Alone Upper Mode, an error occurs if any film is loaded at the lower cartridge

#### Both



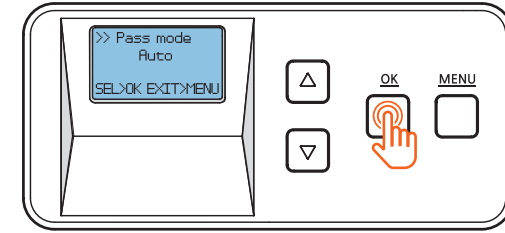
Select this option to laminate both upper and upper sides.

#### Bypass

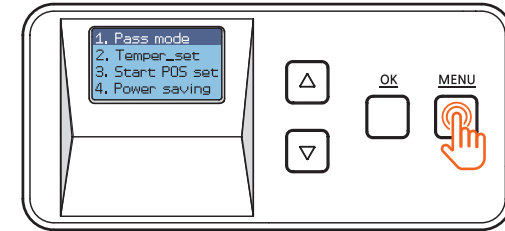


Select this option to pass without laminating either upper or lower side.

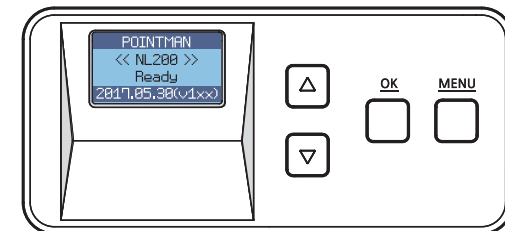
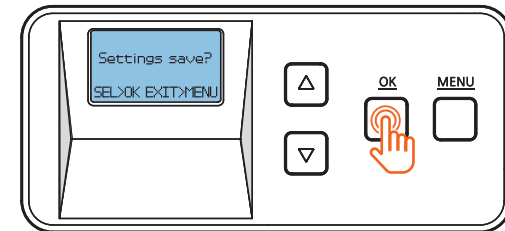
3. After selecting the pass mode, press 'OK' to go back to the previous step.



4. Press 'MENU' to go into the standby mode.



5. If any changes have been made, you will be prompted to save the changes. Press 'OK' to save the new settings or 'MENU' if you do not want to save them.

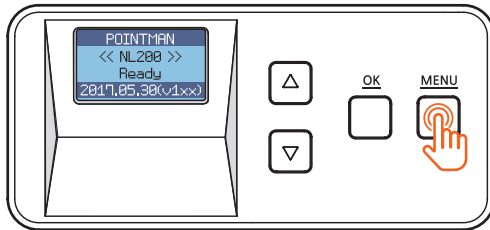


## - Lamination Temperature (Temper\_set)

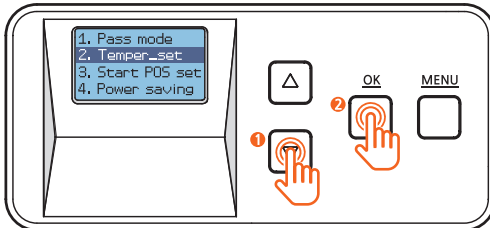
Function: Set the temperature of the lamination heater.

You can set the temperature between 120°C and 190°C(248°F and 374°F) +/- increments of 5°C(9°F)

1. Press 'MENU' to enter the menu mode.

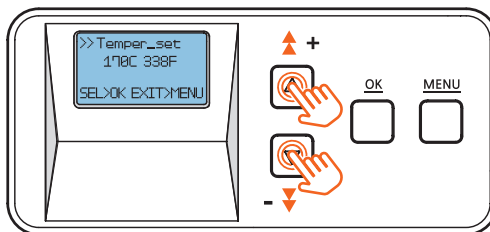


2. Press the menu navigation button to select '2. Temper\_set' and press 'OK'.

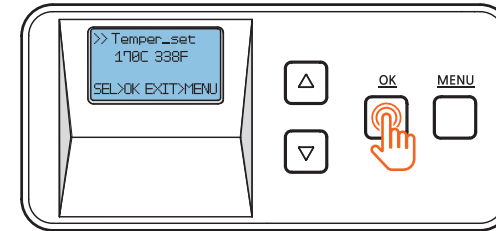


3. Use the menu navigation button to adjust the temperature for the lamination heater.

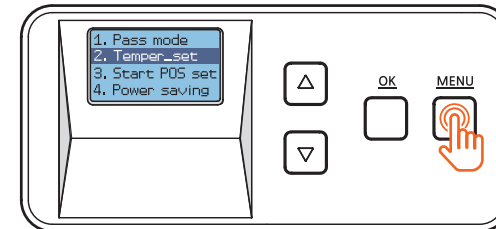
(It can be set between 120°C and 190°C(248°F and 374°F) +/- increments of 5°C(9°F).)



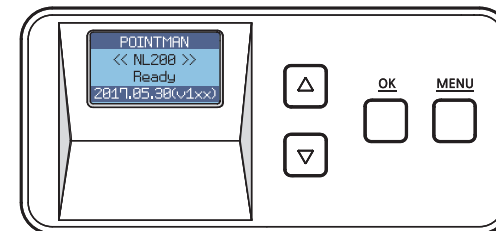
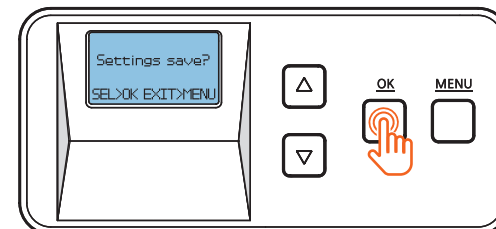
4. Press 'OK' to set the temperature and go back to the previous step.



5. Press 'MENU' to go into the standby mode.



6. If any changes have been made, you will be prompted to save the changes. Press 'OK' to save the new settings or 'MENU' if you do not want to save them.



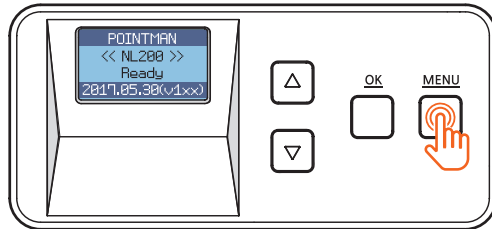
## - Film Position (Start POS set)

Function : Set the position of film and card for lamination.

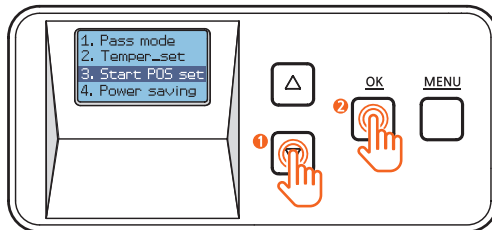
- It can be set between -1.0mm ~+1.5mm +/- increments of 0.1mm.

From the direction of inserting the card, it moves back by '- (L)' value and forward by '+ (R)'.

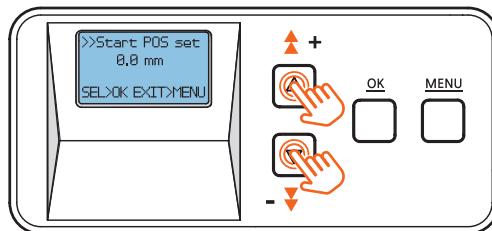
1. Press 'MENU' to enter the menu mode.



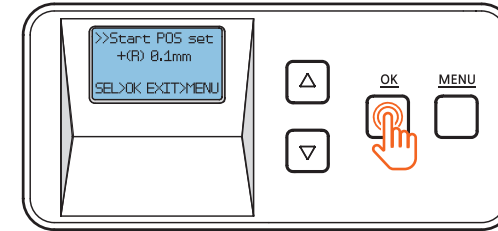
2. Press the Menu Navigation Button to select '3. Start POS set' and press 'OK'.



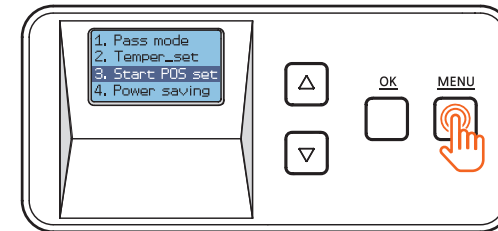
3. Use the Menu Navigation Button to adjust the position to laminate. (It can be set between -1.0mm ~+1.5mm +/- increments of 0.1mm.)



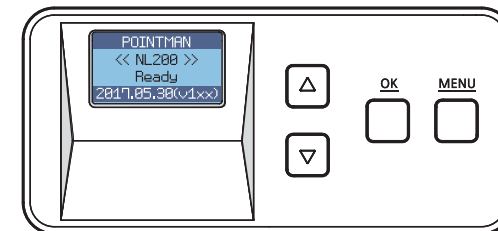
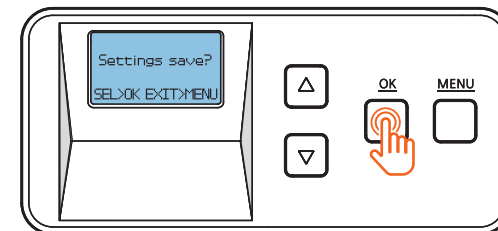
4. Press 'OK' to set the position and go back to the previous step.



5. Press 'MENU' to go into the standby mode.



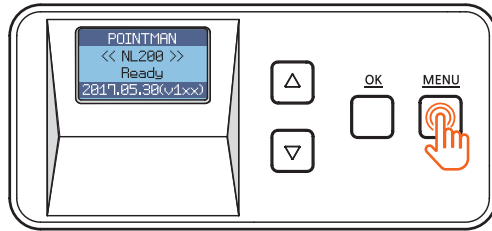
6. If any changes have been made, you will be prompted to save the changes. Press 'OK' to save the new settings or 'MENU' if you do not want to save them.



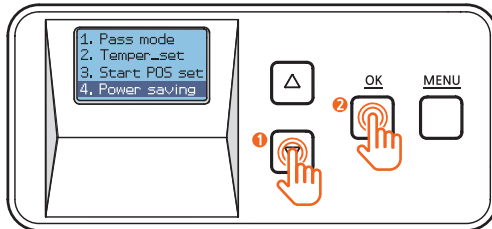
## - Power Saving Mode

Function : The system turns off if it is inactive for a set duration of time. It can be set between 5 and 60 minutes +/- increments of 5 minutes.

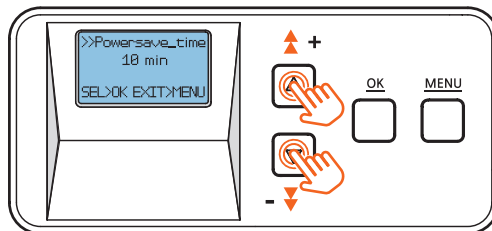
1. Press 'MENU' to enter the menu mode.



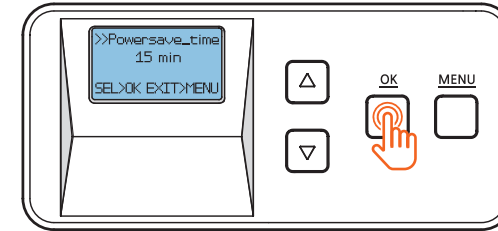
2. Press the Menu Navigation Button to select '4. Power saving' and press 'OK'.



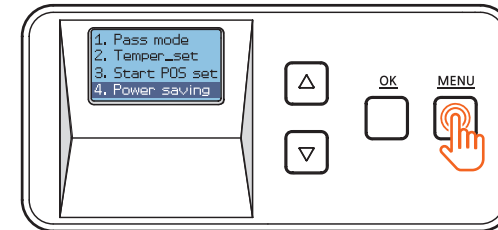
3. Use the Menu Navigation Button to set the power saving mode. (It can be set between 5 and 60 minutes +/- increments of 5 minutes.)



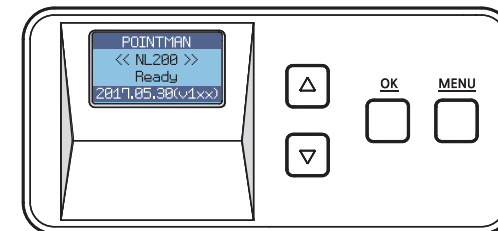
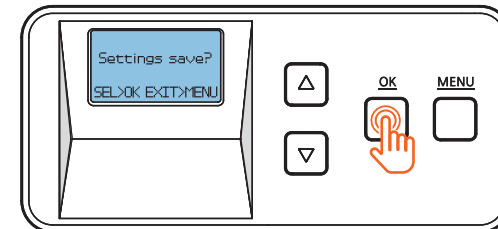
4. Press 'OK' to set the power saving mode and go back to the previous step.



5. Press 'MENU' to go into the standby mode.



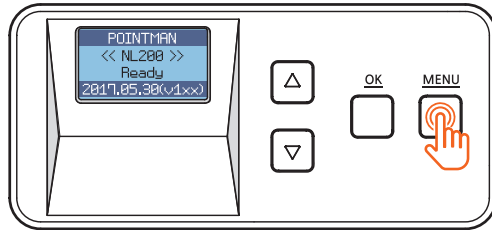
6. If any changes have been made, you will be prompted to save the changes. Press 'OK' to save the new settings or 'MENU' if you do not want to save them.



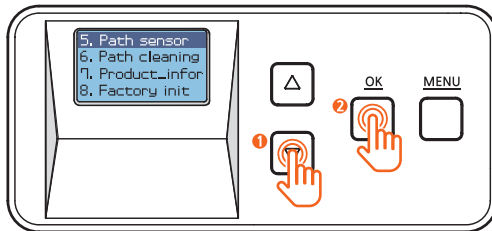
## - Path Sensor

Function : Check whether the path sensor works correctly.

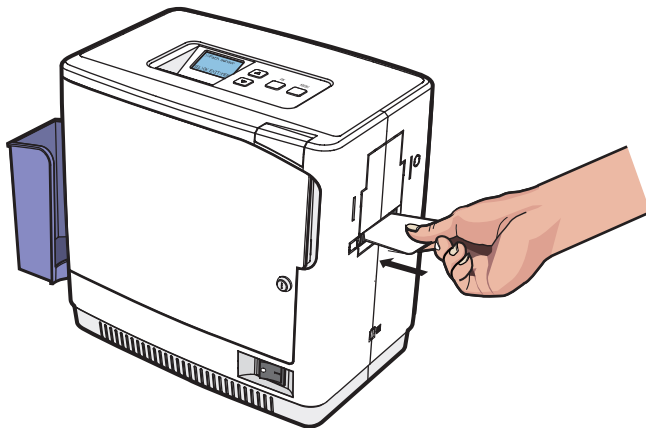
1. Press 'MENU' to enter the menu mode.



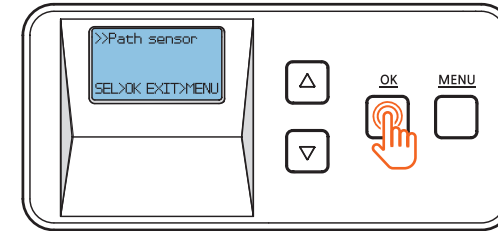
2. Press the Menu Navigation Button to select '5. Path sensor' and press 'OK'.



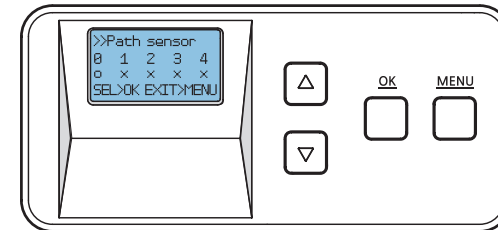
3. Insert a card that is not printed into the Card Slot.  
(Make sure to hold the card until the operation starts.)



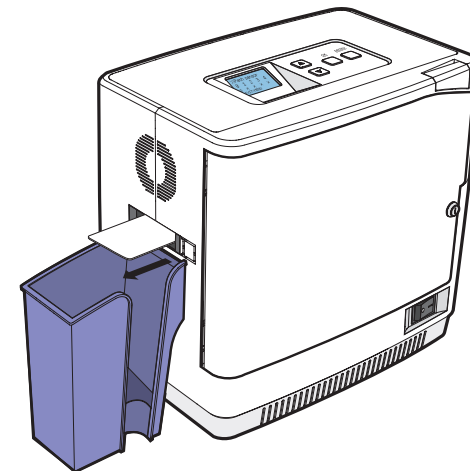
4. Press 'OK' while holding the card and it goes in.



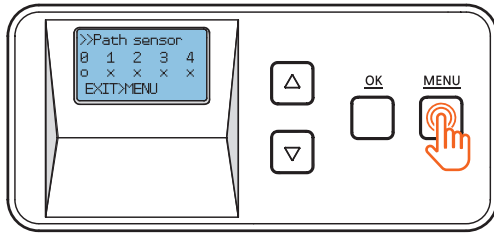
5. The card will move back and forth 5-6 times. Each time the card passes the sensor, the indicator changes from X to O.



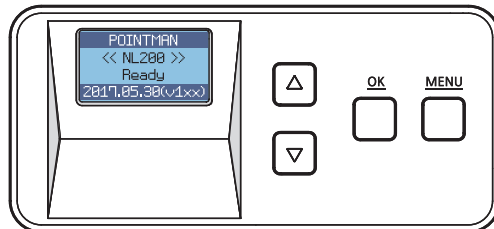
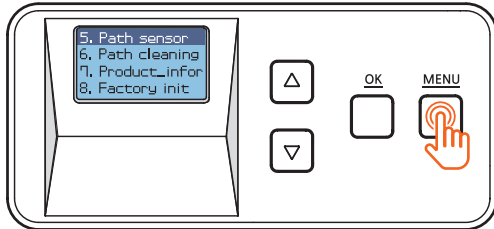
6. The laminator releases the card upon completion.



7. Press 'OK' to go back to the previous step.



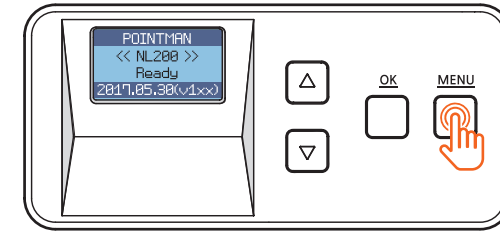
8. Press 'MENU' to go into the standby mode.



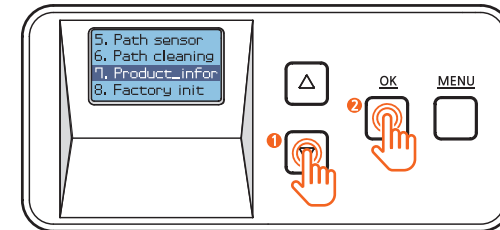
## - Serial No. (Product\_infor)

Function : check the serial number of the product.

1. Press 'MENU' to enter the menu mode.

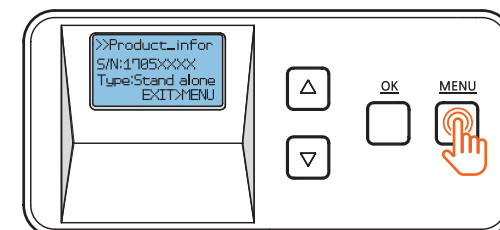


2. Press the menu navigation button to select '7. Product\_infor' and press 'OK'.

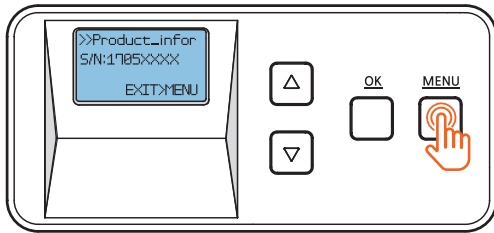


3. Check the serial number.

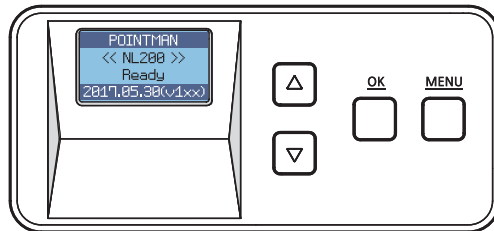
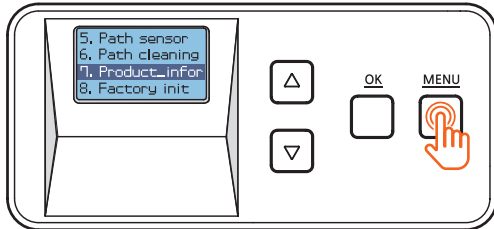
The first 4 digits indicate the year and month of manufacture and the last 4 digits mean production lot number.



6. Press 'MENU' to go back to the previous step.



7. Press 'MENU' to go into the standby mode.

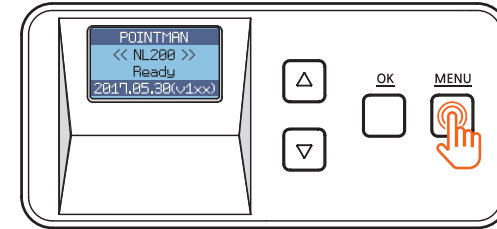


## - Factory Reset (Factory init)

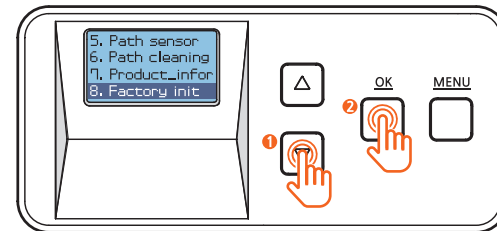
Function : Reset the system to factory default settings.

Default Settings: Pass mode : Auto, Temper\_set: 150°C(302°F), Start\_POS set : 0mm, Power\_saving: 5min

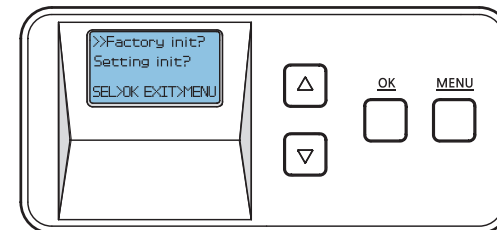
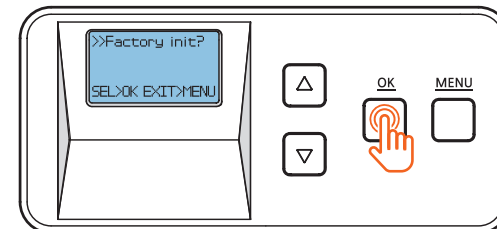
1. Press 'MENU' to enter the menu mode.



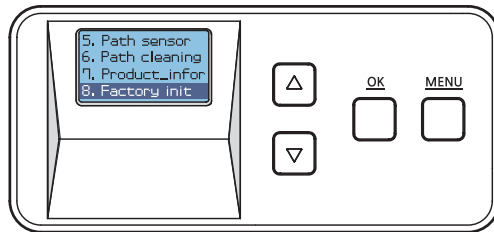
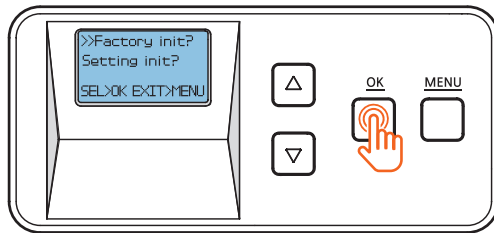
2. Press the Menu Navigation Button to select '8. Factory init' and press 'OK'.



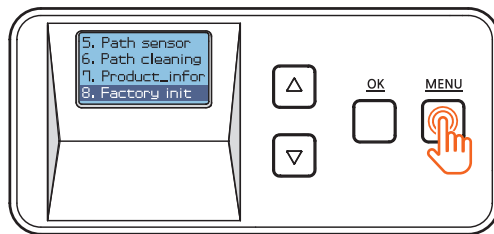
3. Press 'OK' and 'Setting init?' appears on the screen.



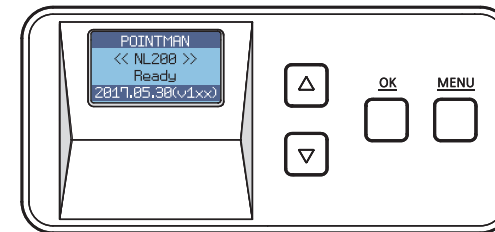
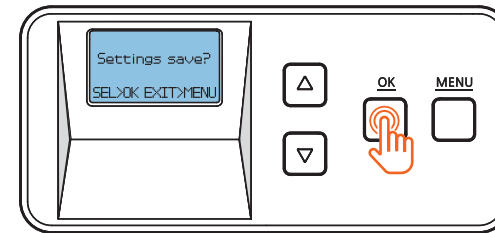
4. Press 'OK' to proceed or 'MENU' to cancel the action. (You will be directed to the previous step when you press either 'OK' or 'MENU'.)



5. Press 'MENU' to go into the standby mode.



6. If any changes have been made, you will be prompted to save the changes. Press 'OK' to save the new settings or 'MENU' if you do not want to save them.





# Maintenance Instructions

## - Supported Cards

The following cards are recommended for the prevention of jams and the best results.

### ① Size

- International Standard (CR-79, CR-80 ISO 7810)
- 53.98mm (W) x 85.60mm (L)/3.375"x2.215"

### ② Thickness

- Standard : 0.76mm~1.0mm (30mil~40mil)

### ③ Acceptable Cards

- Glossy white
- Free of dirt or grease
- Not contaminated
- Free of scratches or dents
- Completely flat
- Static Free

### ④ Unacceptable Cards

- Heavily damaged
- Stained or contaminated
- Scratched
- Bent or deformed
- Embossed



#### Caution

Do not use cards considered unacceptable as they may damage the parts.

# Clean the Laminator

## - Clean the Exterior

- Make sure to turn off the laminator and unplug the power cable before cleaning it with a soft cloth slightly dampened with water.
- Do not allow any liquid to drip inside the printer.
- Make sure that the printer is dry before turning it on.



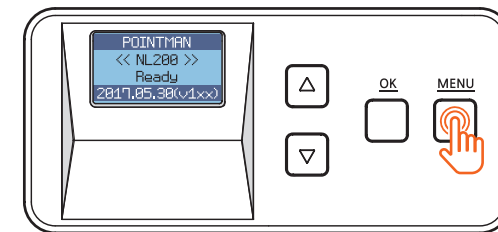
#### Caution

Do not use any liquid / gel containing a high content of alcohol or solvent to clean the printer as it may cause discoloration or fissure on its surface.

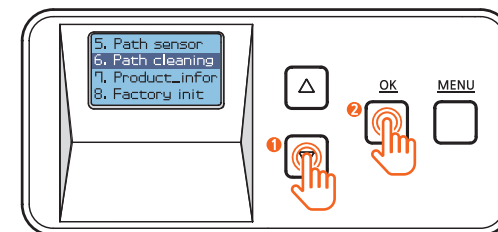
## - Clean Roller Using Cleaning Card

It is recommended to clean the laminator using the cleaning card every month or each time 500 cards are laminated in order to maintain quality and prevent damage to the important parts.

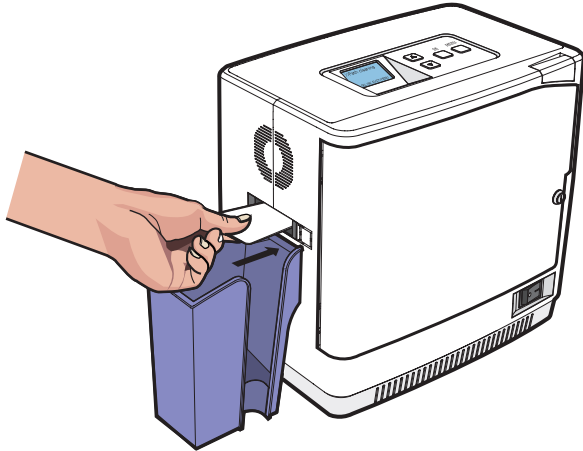
1. Press 'MENU' to enter the menu mode.



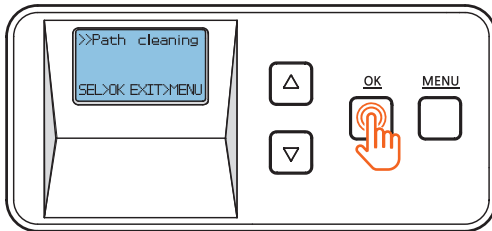
2. Press the menu navigation button to select '6. Path cleaning' and press 'OK'.



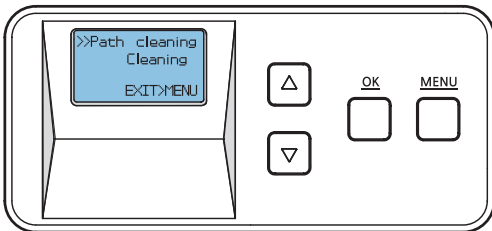
3. Insert the cleaning card to the card ejector.  
(Make sure to hold the card until the operation starts.)



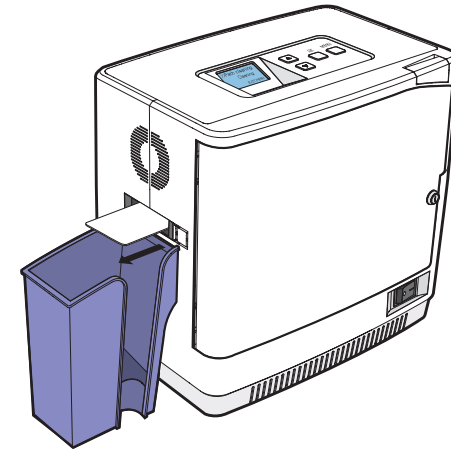
4. Press 'OK' while holding the card and it goes in.



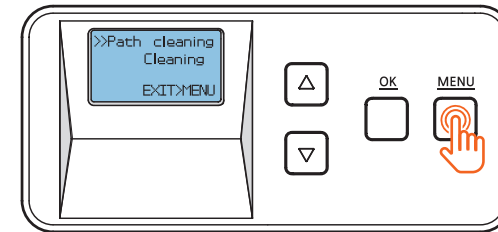
5. The card will move back and forth 3-4 times while cleaning the roller.



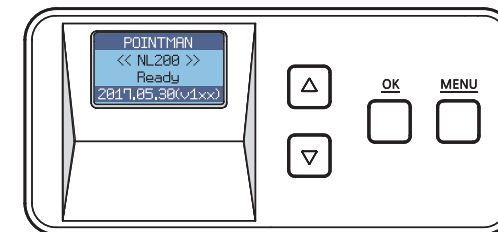
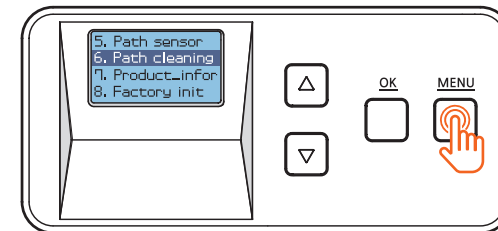
6. The card will be released once the cleaning process is complete.



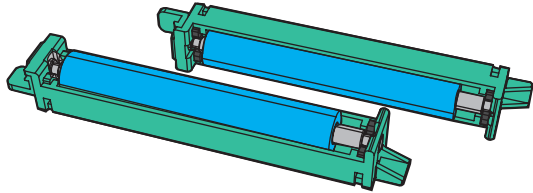
7. Press 'MENU' to go back to the previous step.



8. Press 'MENU' to go into the standby mode.



## - Clean the Blue Cleaning Roller



### Blue Cleaning Roller

This cleaning tool is designed to remove any unwanted materials from the surface of cards, and it can be used semi-permanently since it can be washed.

It is recommended to clean it at least once every two weeks. If more than 400 cards are laminated within a month, it is recommended to clean it every 200 times of use.

1. Remove the cleaning roller from the laminator
2. Wash it under running water.
3. Make sure that it is fully dried before installing it into the laminator.

# Troubleshooting

Some of the problems you may encounter while using the printer can be fixed by referring to the following troubleshooting guide. If the problem persists, then please contact your local dealer.

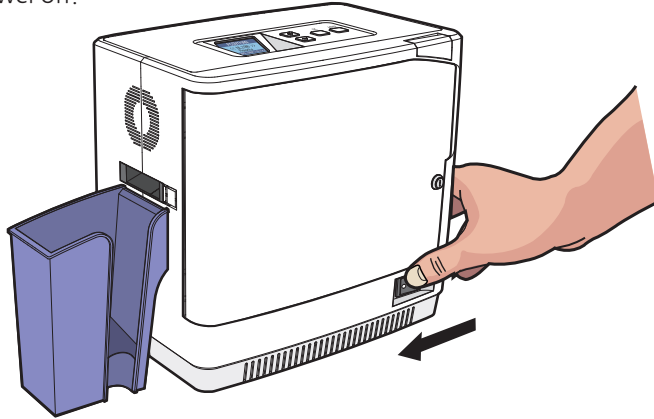
## - Error Messages & Solutions

Error Messages	Description	Solution
E11	The temperature of the heater not in use is too high.	Leave the laminator for a while to cool it off. (Power off)
E13	The card loader is empty.	If the error message persists when the cards are loaded, please contact the service representative for assistance.
E20	The Front Cover is open	Check whether the cover is closed. If the problem persists, please contact the service representative for assistance.
E21	No cartridge is loaded.	Check the cartridge. If the problem persists, please contact the service representative for assistance.
E22	There is no film. The tag cannot be recognized.	Check if there are films. If there are enough films, check whether the tag can be recognized. If not, please contact the service representative for assistance.
E24	The Pass Mode does not match how the cartridge ribbon is loaded. (ex. Pass Mode is set to Both in the menu settings and only the lower cartridge has films.)	Check if there are films. If there are enough films, check whether the tag can be recognized. If not, please contact the service representative for assistance.
E25	The sensor does not recognize the ribbon mark while lamination is in process.	Check the ribbon mark on the film. If there is no problem with the ribbon mark, please contact the service representative for assistance.
E26	Jam occurs when there is no lamination process.	If there is no card inside the laminator or slot, the system goes back to normal. If the problem persists, please contact the service representative for assistance.
E42	The heater module fails to return to its original position.	Restart the system 2-3 times. If the problem persists, please contact the service representative for assistance. (This is caused by overheating. Please contact the service representative promptly to avoid injuries.)
W10	There are 40 or fewer ribbon films.	Replace the films.

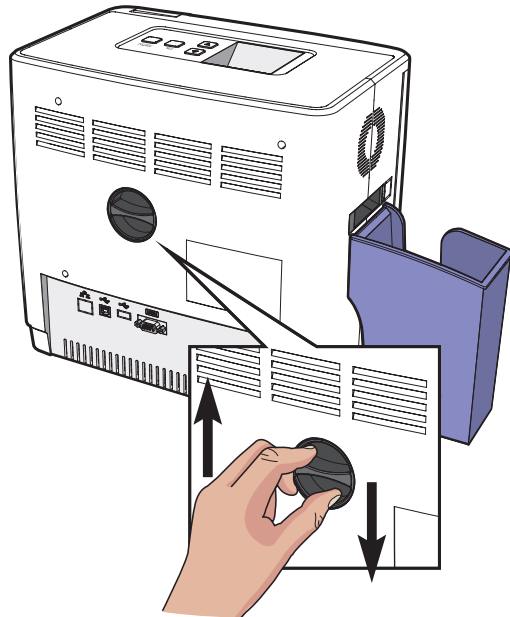
## - Remove Jammed Card

Error Messages	Description	Solution
E31	Jam occurs while laminating.	Turn the power off and release the card (using the handle on the back). If the problem persists after changing the settings, please contact the service representative for assistance.

1. Turn the power off.



2. Rotate the knob and remove the jammed card as shown in the image.



## Film Specifications

### - Patch-Type Film

Type	Specifications
Clear (1.0mil)	500 Prints/Roll
Hologram(1.0 mil)	500 Prints/Roll

# Laminator Specifications

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## - Features

### Quick heating process and laminating performance

- After initialization, the system is ready within 40 seconds and laminates both sides within 20 seconds.

### Easy operation and configuration

- Easy to operate and configure the quality settings
- Easy to load the film cartridge thanks to door-type front cover
- Designed with a knob for removing jammed card
- Wide display and convenient button control (4Line MONO LCD, 4 Control Buttons)

### High level of security

- The front cover can be locked to protect the films inside (optional feature).

### Large amount of laminator films

- Up to 500 laminator films (Dual sides) are supported.

## - Standard Specifications

### ① Laminating Type

- Heat Roller +Halogen Lamp Type

### ② Laminating Function

- Edge to edge, Dual/single sided lamination

### ③ Laminating Speed

- 8mm/s (for both Dual and single sided lamination)

### ④ Laminating Temperature

- 120°C to 195°C (248°F to 383°F)

### ⑤ Supported Card Size

- CR-79, CR-80

### ⑥ Film Patch Dimensions

- Size: 81mm x 51mm (CR-79, CR-80)
- Thickness: 1.0 mil

### ⑦ Film Patch Capacity

- 500 patches / roll (1.0mil)

## - Optional Specifications

- Card Stacker: 150 cards (0.76mm)
- Front Cover Lock (for the protection of films)
- Cradle (for connecting to a card/retransfer printer)

## - Laminator Specifications

### ① Product Dimensions(Width x Length x Height) and Weight

#### 1) NL200 (Standard)

- Dimensions : 216.5mm(W) x 320mm(L) x 313.5mm(H)
- Weight : 9.45kg

#### 2) NL200 (Standard, Card Stacker)

- Dimensions : 216.5mm(W) x 443.4mm(L) x 313.5mm(H)
- Weight : 9.65kg

#### 3) NL200H (Standard, Card Input Hopper)

- Dimensions : 216.5mm(W) x 377.2mm(L) x 313.5mm(H)
- Weight : 10kg

#### 4) NL200H (Standard, Card Input Hopper, Card Stacker)

- Dimensions : 216.5mm(W) x 500.6mm(L) x 313.5mm(H)
- Weight : 10.2kg

### ② Power Supply

- AC 110V ~ 240V
- Single 600W / Dual 600W

### ③ Interface

- USB 2.0
- RS-232

# Warranty Certificate

Product		Name of Customer	
Model No.		Address	
Manufacture No.		Date of Purchase	(YYYY/MM/DD)
Size		Warranty Period	(30 months) from the date of purchase

Purchase	
Dealer	Address: TEL)

## - Repaired at cost if any of the following apply.

- The warranty has expired.
- The product is damaged by the negligence or misuse of the consumer (e.g. impact, water, fire).
- The product is damaged by a natural disaster (e.g. earthquake, flood).
- The product is damaged from unauthorized repair or modification.
- Consumable parts are consumed (according to the company policy).
- The product is damaged by the use of unsupported cards.

# Regulatory

## -FCC



FCC IDENTIFIER : XTNNL200  
 Name of Grantee : TIT ENG Co.,Ltd.  
 Equipment Class : Part 15 Low Power Communication Device Transmitter  
 Notes :

### FCC Statement

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device should be installed and operated with minimum 20 cm between the radiator and your body.

## - EU

This product is CE marked according to the provision of the R&TTE Directive (99/5/EC). Here by T.I.T ENG Co., Ltd. Declares that this product is in compliance with the essential requirement and other relevant provisions of Directive 1999/5/EC.



-RoHS



We hereby guarantee that all products that POINTMAN will deliver directly or through any third party to you, do not contain Pb, Cd, Hg, CR+6, PBB, PBDE to the best of our knowledge, Thereby our products are in accordance with RoHS2 Directive.

- Directive 2002/95/EC
- Directive 2005/717/EC
- Directive 2005/747/EC

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The Company would be very grateful if any accidental inaccuracies could be pointed out to us, as well as any other constructive criticism which might lead to a better understanding.



[www.pointman.co.kr](http://www.pointman.co.kr)

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